What is claimed is:

1. An electromagnetic drive device comprising:

a coil frame having a hollow tubular shape and formed of two coil frame halves divided along a longitudinal direction thereof,

a magnet rotor rotatably disposed in the coil frame and having a rotational shaft extending along the longitudinal direction,

a transmission member attached to the magnet rotor for transmitting a rotation of the magnet rotor, and

a coil wound around an outer periphery of the coil frame in a direction intersecting joint faces at longitudinal ends of the two coil frame halves.

2. An electromagnetic drive device according to claim 1, wherein said transmission member extends in a direction substantially perpendicular to a direction that the coil is wound, said coil frame having an opening for allowing the transmission member to rotate for a predetermined angle.

3. An electromagnetic drive device according to claim 1, wherein said coil is wound in a direction substantially perpendicular to the joint faces, and said transmission member extends in a direction substantially perpendicular to a direction that the coil is wound.

4. An electromagnetic drive device according to claim 1, wherein one of said coil frame halves includes a pair of bearings for supporting the rotational shaft of the magnet rotor.

5. An electromagnetic drive device according to claim 1, wherein one of said two coil frame halves includes one of a pair of bearings for supporting the rotational shaft, and the other of said two coil frame halves includes the other of the pair of the bearings for supporting the rotational shaft.

6. An electromagnetic drive device according to claim 1, wherein one of said coil frame halves includes a first bearing concave portion for supporting one end of the rotational shaft, and the other of said coil frame halves includes a second bearing concave portion for supporting the other end of the rotational shaft.

7. An electromagnetic drive device according to claim 6, wherein each of said first and second bearing concave portions is formed in a projection extending from one of the coil frame halves toward the other of the coil frame halves.

8. An electromagnetic drive device according to claim 6, wherein said rotational shaft has ends formed in a pointed shape, said bearing concave portions being formed of pivot bearings.

9. An electromagnetic drive device according to claim 6, wherein said coil is wound in a direction intersecting the joint faces at two end surfaces of the coil frame halves in the longitudinal direction.

10. An electromagnetic drive device comprising:

a cylindrical magnet rotor having a rotational shaft and a pair of magnetic poles at two sides thereof in a direction perpendicular to the rotational shaft,

a transmission member attached to the magnet rotor and extending in a direction substantially perpendicular to the magnetic poles and in a radial direction of the magnet rotor,

a coil frame with a hollow tubular shape for retaining the transmission member and the magnet rotor therein to be rotatable through the rotational shaft, said coil frame having two coil frame halves divided in a direction intersecting the magnetic poles,

a coil wound around an outer periphery of the coil frame in a direction substantially along the magnetic poles, and

an opening formed at joint faces of the coil frame for allowing the transmission member to rotate for a predetermined angle.

11. An electromagnetic drive device according to claim 10, wherein said two coil frame halves are connected to form the coil frame; said transmission member projects outwardly through the opening, and; one of said coil frame halves includes a first pivot bearing portion for supporting one end of the rotational shaft, and the other of said coil frame halves includes a second pivot bearing portion for supporting the other end of the rotational shaft.

12. A light quantity adjustment device comprising the electromagnetic drive device according to claim 1, a base plate attached to the electromagnetic drive device and having an optical axis aperture, and a blade member attached to the

transmission member for adjusting a quantity of light passing through the optical axis aperture so that when the magnet rotor is rotated, the blade member moves relative to the optical axis aperture.

13. A light quantity adjustment device comprising the electromagnetic drive device according to claim 10, a base plate attached to the electromagnetic drive device and having an optical axis aperture, and a blade member attached to the transmission member for adjusting a quantity of light passing through the optical axis aperture so that when the magnet rotor is rotated, the blade member moves relative to the optical axis aperture.